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|-----------------|-------------|----------------------|---------------------|------------------|
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10/653,690

09/02/2003

John R. Ripley

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06/30/2006

TAYLOR RUSSELL & RUSSELL, P.C.  
4807 SPICEWOOD SPRINGS ROAD  
BUILDING TWO SUITE 250  
AUSTIN, TX 78759

EXAMINER

BLACK, LINH

ART UNIT

PAPER NUMBER

2163

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/653,690 | <b>Applicant(s)</b><br>RIPLEY ET AL. |  |
|                              | <b>Examiner</b><br>LINH BLACK        | <b>Art Unit</b><br>2163              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/10/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This communication is in response to the documents dated 9/02/03. Claims 1-47 are pending in the application. Claims 1, 28, and 45 are independent claims.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-47 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-33 of U.S. Patent No. 6829606. Although

Art Unit: 2163

the conflicting claims are not identical, they are not patentably distinct from each other because substantially similar in scope and the same limitations.

|            |                                      |
|------------|--------------------------------------|
| 6829606    | 10653690                             |
| 1,3,4      | 1, 27-28 and 45, 2 and 4             |
| 2, 5,6-7   | 2,12,25-26 and 42-43 and 9-11 and 32 |
| 8, 9, 10   | 5 and 8, 6, 7-8                      |
| 16, 20, 17 | 13, 16, 19,                          |

Certain limitations including "selecting choice algorithms" of the patent '9606 is equivalent to the application's limitation: "user defined functions".

### ***Claim Objections***

Claim 17 is objected to because there is no support or definition of template value in the specification. Clarification is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-24 and 27-41 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al. (US 5963940), and further in view of Stellwagen, Jr. (USP 5835755).

As per claims 1 and 27, Applicants describe the anchor document in the specification, page 1: "Traditional search methods that make use of exact, partial and range retrieval paradigms do not satisfy the content-based retrieval requirements of many users. This has led to the development of similarity search engines. [0004] Similarity search engines have been developed to satisfy the requirement for a content-based search capability that is able to provide a quantitative assessment of the similarity between an anchor record and multiple target records. The basis for many of these similarity search engines is a comparison of an anchor record band or string of data with target record bands or strings of data that are compared serially and in a sequential fashion.

Liddy et al. teach user defined functions/search algorithms – col. 15, lines 8-22; col. 21, line 25 to col. 22, line 7; col. 25, line 17 to col. 26, line 42; configuration files for a similarity search server in one or more remote dbms – col. 5, lines 22-54; col. 21, line 25 to col. 22, line 49; receiving a request ...for initiating a similarity search; the request designating an anchor document and at least one search document/target – col. 10, lines 3-15; col. 27, line 59 to col. 8, line 15; col. 30, lines 3-31; generating one or more commands...sending the command(s)...to determine normalized document similarity scores – col. 2, lines 37-63; col. 19, line 7 to col. 20, line 67; generating a search result and transmitting to one or more clients – col. 6, lines 49-58; col. 8, lines 10-27.

Art Unit: 2163

However, Liddy et al. do not explicitly teach dbms. Stellwagen, Jr. teaches users can perform searches against databases, typically using DBMS - col. 3, lines 39-66; parallel execution for the user requests – col. 5, last paragraph; heterogenous databases – col. 6, last paragraph. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Liddy et al.'s and Stellwagen, Jr.'s teachings in order to better manage the search and retrieval processes of data.

As per claim 2, Liddy et al. teach persisted schema – col. 12, lines 39-64; col. 13, lines 12-28; col. 19, lines 57-65; defining a structure of search terms – col. 2, line 37 to col. 3, line 60; col. 15, lines 59-67; target search values – col. 15, lines 8-22; measure – col. 22, first paragraph; col. 23, line 34 to col. 24, line 12; weight algorithms – col. 12, line 10-29; table 5; col. 20, line 55 to col. 21, line 25; col.. 23, line 33 to col. 24, line 12.

As per claim 3, Liddy et al. teach determine attribute similarity scores, weighting functions and choice algorithms for determining normalized document scores – col. 19, line 8 to col. 20, line 67; col. 22, line 33 to col. 24, line 12.

As per claims 4-6, 12, Liddy et al. teach measure algorithms, and similarity scores values at 0.0 and 1.0 - col. 19, line 7 to col. 20, line 67; weight algorithms and scores – col. 12, line 10-29; table 5; col. 20, line 55 to col. 21, line 25; col.. 23, line 33 to col. 24, line 12; threshold value for each tag – col. 15, lines 8-22; retrieval criteria – col. 24, line 56 to col. 25, line 15.

As per claims 7-8, Liddy et al. teach restrictions on structuring the similarity scores, range of percentiles of scores – col. 14, lines 25-54; col. 15, lines 8-22; col. 23, line 33 to col. 24, line 12; col. 24, line 55 to col. 25, line 16.

As per claims 9-11, Liddy et al. teach sorting and grouping the scores – col. 3, lines 42-63; col. 21, lines 32-67; col. 24, line 55 to col. 25, line 15.

As per claims 13-16, Liddy et al. teach ...an interface for the data source – fig. 1, items 37, 70; col. 4, lines 52-58; col. 8, line 1-27; data source object comprising a name, a URL, a username, a password... - fig. 10, items 330; col. 28, lines 45-61.

As per claims 20-24, Liddy et al. teach generating all similarity scores of multiple search documents... – col. 2, lines 37-63; col. 19, line 7 to col. 20, line 67 (since the results are based on a most relevant document based on the similarity scored rank, thus, minimizing the number of disk access required). However, Stellwagen, Jr. teaches users can perform searches against databases, typically using DBMS - col. 3, lines 39-66; parallel execution for the user requests – col. 5, last paragraph; horizontal and vertical partitioning of database – col. 6, line 65 to col. 7, line 51; heterogenous databases – col. 6, last paragraph. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Liddy et al.'s and Stellwagen, Jr.'s

teachings so that database partitions can be concurrently accessed in order to optimize the performance of the database systems.

**Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al. (US 5963940), Stellwagen, Jr. (USP 5835755), and further in view of Lang et al. (US 2003/0083891).**

As per claims 14-16, Liddy et al. do not teach SSL or gateway. Stellwagen, Jr. teaches "The Control Server 30 is a multiple-thread gateway process that interfaces between the Client Application 26 and the Navigation Server 22. A user chooses a Control Server 30 to establish a session and the Control Server 30 maintains the user's session context. The Control Server 30 also controls execution of queries, merges preliminary results returned from multiple Data Servers 24, and returns final results to the Client Application 26" – col. 4, lines 14-67; col. 5, line 8-37. However, Liddy et al. and Stellwagen, Jr. do not teach SSL. Lang et al. teach devices and processes for organizing and managing temporary personnel to perform technical and non-technical services – par. 1; search the tempsource system for candidate matches based on the competency requirements – pars. 0117-130; the operations were performed by using HTML/Java....SQL software, and a Secure Socket Layer – par. 0042. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Liddy et al.', Stellwagen, Jr.'s, and Lang et al.'s teachings in order to securely manage the search and retrieval processes of data.



Art Unit: 2163

As per claims 17-19, Liddy et al. teach username value - fig. 10, items 330; col. 28, lines 45-61; data type value - col. 8, lines 1-67; datasource value - col. 21, lines 28-67 col. 23, line 33 to col. 24, line 12; schema value - col. 12, lines 39-64; col. 13, lines 12-28; col. 19, lines 57-65; measure - col. 22, first paragraph; col. 23, line 34 to col. 24, line 12; statistic value - col. 31, line 25-40. In the specification, Applicants teach a datasource driver may a SSL. However, Stellwagen, Jr. further teaches schema value - fig. 3, item 36. However, Liddy et al. and Stellwagen, Jr. do not teach SSL. Lang et al. teach search the tempsource system for candidate matches based on the competency requirements - pars. 0117-130; the operations were performed by using HTML/Java....SQL software, and a Secure Socket Layer - par. 0042. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Liddy et al.', Stellwagen, Jr.'s, and Lang et al.'s teachings in order to securely manage the search and retrieval processes of data.

Claims 28-41 and 45-47 claim the same subject matter as of claims 1-27 and 44, thus claims 28-41 and 45-47 are rejected based on the same ground of rejection.

### ***Allowable Subject Matter***

Claims 25-26 and 42-43 are objected to as being dependent upon a rejected base claim, but would be allowable if the double patenting rejection above overcome

and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Jain et al. (US 5893095) also teach user defined functions/search algorithms – col. 5, lines 4-32; col. 6, lines 54-67; col. 18, lines 35-52; configuration files for a similarity search server in one or more remote dbms – col. 5, lines 4-32; col. 3, first paragraph; col. 9, lines 48-50; fig. 1b, item 160; col. 17, line 23 to col. 18, line 52; receiving a request ...for initiating a similarity search – col. 6, lines 25-67; col. 11, last paragraph; the request designating an anchor document and at least one search document/target – col. 6, lines 10-17; col. 11, last paragraph; col. 17, line 1 to col. 18, line 52; generating one or more commands...sending the command(s)...to determine normalized document similarity scores – col. 9, line 64 to col. 10, line 10; col. 12, line 62 to col. 13, line 29; col. 17, line 22 to col. 18, line 52; col. 19, lines 29-54; generating a search result and transmitting to one or more clients – col. 9, line 64 to col. 10, line 10; col. 11, lines 35-52; col. 13, lines 20-29

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on 8am - 5pm.

Art Unit: 2163

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LINH BLACK  
Examiner  
Art Unit 2163



June 24, 2006



ALFORD KINDRED  
PRIMARY EXAMINER